

Comments on “Assessment of Overweight/Obesity and Elevation of Blood Pressure in Schools in Rural and Urban Areas in the Backlands of Bahia – A Cross-Sectional Study”

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Dear Editor,

I recently came across the article titled “Assessment of Overweight/Obesity and Elevation of Blood Pressure in Schools in Rural and Urban Areas in the Backlands of Bahia – A Cross-Sectional Study,” and I felt compelled to write in. First and foremost, I want to commend the authors for tackling a subject that’s growing more urgent with each passing year. Childhood obesity and elevated blood pressure are emerging earlier and becoming more frequent across the globe, and this study makes a meaningful contribution by examining the problem in a region that’s often overlooked.¹

The statistic that nearly 28% of children aged five to ten were either overweight or obese—and that around 8% had elevated blood pressure—is worrying, but unfortunately, not unexpected. These numbers mirror broader global patterns, yet the study’s strength lies in its comparative approach. Looking at rural and urban populations side by side highlights distinctions that can often get lost in national averages. The finding that urban children had a higher rate of abdominal obesity didn’t surprise me; urban settings tend to promote sedentary behavior and greater intake of processed foods.

One thing I would’ve liked to see, though, is some consideration of the kids’ physical activity levels. Even rough estimates—based on parent or teacher input, for example—would have added valuable context. We know

from studies in other countries, like the long-term survey work out of China, that fitness levels among young people have been falling for years, while cardiovascular risks have risen in tandem.² It’s not always about what children eat; sometimes, it’s also about what they lack, such as play or move regularly.

Another point that stood out to me was how broadly the study defined its geographic focus. The phrase “backlands of Bahia” evokes a lot but does not offer enough detail. As McGee has pointed out, Bahia’s interior regions can be tricky to map in terms of clear administrative or cultural boundaries.³ Without a clearer specification or even a map, it becomes harder to judge how generalizable the findings might be, or to compare them with data from similar regions.

Lastly, I hope this research leads to further studies that take a longer view. Cross-sectional designs are useful, but they do not capture how these health markers evolve over time. Following up with a cohort study or evaluating the outcomes of school-based interventions—ones that encourage more physical activity or improve diet—could offer actionable solutions for policymakers and school systems alike.

All in all, this is a thoughtful and timely paper. I appreciate the work that went into it and hope future efforts will continue building on this foundation with even more granular and longitudinal data.

Keywords

Pediatric Obesity; Blood Pressure; Urban Health; Rural Health; Brazil.

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Reply

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We appreciate the interest in our article, “Assessment of Overweight/Obesity and Elevation of Blood Pressure in Schools in Rural and Urban Areas in the Backlands of Bahia”,¹ and thank the author of the letter for the thoughtful comments and for emphasizing the growing relevance of childhood obesity and elevated blood pressure worldwide. We fully agree that these conditions are becoming increasingly prevalent at younger ages and that regional data, particularly from underrepresented areas, are essential for understanding their determinants.

The observation that urban children have higher rates of abdominal obesity aligns with the global trend of lifestyle-related disparities between urban and rural settings. In this context, assessing children's physical activity levels would provide valuable insights into the magnitude of sedentary behavior in this age group. We initially attempted to collect this data using the International Physical Activity Questionnaire (IPAQ). However, significant challenges in administering the questionnaire resulted in an insufficient number of valid responses for meaningful analysis. For this reason, we chose not to include the variable in the final dataset, as doing so could have compromised the validity of our results.

Regarding the second issue raised regarding the geographic scope, as detailed in the inclusion criteria, the research was conducted in four municipalities in the backlands of Bahia: Serrinha, Biritinga, Barrocas, and Teofilândia. These

municipalities share similar socioeconomic and cultural characteristics — generally below the state average — but are representative of the semi-arid region of northeastern Brazil. For context, Serrinha is the most populous municipality, with a Human Development Index (HDI) of 0.634, followed by Barrocas (0.610), Teofilândia (0.566), and Biritinga (0.538), all classified as having medium human development according to the United Nations Development Programme (UNDP).²

We also concur that longitudinal approaches are crucial for understanding how these health indicators evolve. Our cross-sectional investigation was conducted within a larger research initiative that includes a cohort component. As part of this ongoing work, a school meal intervention has been implemented and analyzed, and additional studies are underway to assess its long-term effects on children's nutritional and cardiovascular health.³ This comprehensive approach provides valuable insight into how environmental and dietary modifications within the school setting may influence the outcomes observed.

We appreciate the opportunity to discuss these points further and hope this reply helps clarify the issues raised. Constructive scientific exchanges such as this one are fundamental to refining understanding and guiding future research.

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